Claims

1. An electrical resistance element comprising a glow zone and two power supply terminals, c h a r a c t e r i s e d in that the glow zone (2) of the element (1) is tubular; and in that a union (5,6) is provided between respective terminals (3, 4) and respective ends (7, 8) of the glow zone (2).

2. A resistance element according to Claim 1, c h a r a c t e r i s e d in that the glow zone (2) has generally the same inner diameter as the largest inner diameter of the union (5, 6).

3. A resistance element according to Claim 1 or 2, c h a r a c t e r i s e d in that the union (5, 6) has generally the same outer diameter as the glow zone (2); and in that the union (5, 6) has a successively decreasing wall thickness at its end facing towards the glow zone (2).

4. A resistance element according to Claim 3, c h a r a c t e r i s e d in that the successively decreasing wall thickness follows the function $r = \frac{ro}{\sqrt{lo}}\sqrt{l}$, where l coincides with the longitudinal axis of the union (5,6), r corresponds to the inner radius of the union, lo corresponds to the length along which the wall thickness decreases, and ro corresponds to the largest inner radius of the union.

5. A resistance element according to Claim 1, 2, 3 or 4, c h a r a c t e r i s e d in that the largest inner radius of the union (5,6) is 3 – 5 times larger than its smallest inner radius.

6. A resistance element according to any one of the preceding Claims, c h a r a c t e r i s e d in that the proportions of the element (1) are such that in the case of an element with a glow zone (2) that has an outer diameter of about 12 mm its inner diameter will be about 10 mm while the union (5, 6) will have an outer diameter of about 12 mm and a smallest inner diameter of about 3 mm while the successively decreasing wall thickness of the union (5,6) will extend through a distance of about 16 mm.

7. A resistance element according to any one of the preceding Claims,

c h a r a c t e r i s e d in that respective union (5, 6) is welded to respective ends (7, 8) of the glow zone.

8. A resistance element according to any one of the preceding Claims,

c h a r a c t e r i s e d in that respective union (5, 6) and respective terminals (3,4) together form a one-piece structure.